

California Energy Commission
STAFF REPORT

LOCALIZED HEALTH IMPACTS REPORT

Addendum 16 for Selected Projects With Location Changes
Awarded Funding Through the Alternative and Renewable
Fuel and Vehicle Technology Program Under Solicitation
PON-13-606 – Electric Vehicle Charging Infrastructure

California Energy Commission
Edmund G. Brown Jr., Governor



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ADDENDUM 16

The *Localized Health Impacts (LHI) Report for Selected Projects Awarded Funding Through the Alternative and Renewable Fuel and Vehicle Technology Program Under Solicitation PON-13-606* was posted April 11, 2014 (CEC-600-2014-002)¹. This addendum uses the same approach to assess the localized health impacts for projects with locations changes or added locations. The City of San Diego proposes to add four locations that include 18 electric vehicle charging stations. The Mendocino Land Trust proposes to add seven locations that include seven electric vehicle charging stations. The newly proposed locations are described in Table 1, along with environmental justice (EJ) indicators² (further detail in Appendix A). Charger quantity and type for the new locations are comparable to the original proposal.

**Table 1: New Proposed Site Locations for the City of San Diego and the Mendocino Land Trust, With Electric Vehicle Charging Type and Quantity, Along With Environmental Justice Indicators
Level (L1) Level 2 (L2)**

Grantee	New or Added Site Locations	Electric Vehicle Charging Type and Quantity	EJ Indictors for Location
City of San Diego	Balboa Park Pan American Plaza Parking Lot 2001 Pan American Plaza San Diego, CA 92101	7 L2 chargers	Poverty
City of San Diego	Ruben H Fleet Science Center 1875 El Prado San Diego, CA 92101	3 L2 chargers	Poverty
City of San Diego	South De Anza Cove Park 2590 E. Mission Bay Drive San Diego, CA 92109	4 L2 chargers	Poverty
City of San Diego	Mission Bay Bonita Cove 1100 West Mission Bay Drive San Diego, CA	4 L2 chargers	Poverty
Mendocino Land Trust	City of Casper Community Center 15051 Casper Road Casper, CA 95420	1 pedestal charger with 2 L2 and 2 L1 outlets	Age

1 Brecht, Patrick, Jennifer Allen, Lindsey Tanimoto. 2014. *Localized Health Impacts Report*. California Energy Commission, Fuels and Transportation Division. Publication Number: CEC-600-2014-002.

2 The EJ indicators follow: (i.) minority subset represents more than 30 percent of a given city's population (2010), (ii.) city's poverty exceeds California's poverty level of 15.3 percent (2014), (iii.) city's unemployment rate exceeds California's unemployment rate of 5.0 percent as of February 2017, and (iv.) city's percentage of persons younger than 5 years of age or older than 65 years of age is 20 percent higher than California's average. For the entire state, the percentage of persons under the age of 5 years is 6.8 percent, and the percentage of persons over the age of 65 years is 11.4 percent.

Grantee	New or Added Site Locations	Electric Vehicle Charging Type and Quantity	EJ Indicators for Location
Mendocino Land Trust	Fort Bragg City Hall 450 N. Franklin Street Fort Bragg, CA 95437	1 pedestal charger with 2 L2 and 2 L1 outlets	Poverty and Minority
Mendocino Land Trust	Laurel Street Parking Lot 230 E. Laurel Street Fort Bragg, CA 95437	1 pedestal charger with 2 L2 and 2 L1 outlets	Poverty and Minority
Mendocino Land Trust	216 Main Street Point Arena, CA 95468	1 pedestal charger with 2 L2 and 2 L1 outlets	Poverty and Minority
Mendocino Land Trust	Mendosa Harvest Market 10510 Howard Street Mendocino, CA 95460	1 pedestal charger with 2 L2 and 2 L1 outlets	Age
Mendocino Land Trust	City of Willits Parking Lot W. Mendocino Avenue and School Street Willits, CA 95490	1 pedestal charger with 2 L2 and 2 L1 outlets	Poverty
Mendocino Land Trust	City of Willits Museum Parking Lot 400 E. Commercial Street Willits, CA 95490	1 pedestal charger with 2 L2 and 2 L1 outlets	Poverty

Source: California Energy Commission staff

Air Quality and EJ Indicators

The newly proposed station locations (electric vehicle charging stations) are in nonattainment zones for ozone, particulate matter (PM³) 2.5 and PM 10. If a project site is in a nonattainment zone and has more than one EJ indicator, as shown in Table 1, with further detail in Table 2, it is considered a high-risk community, according to the Environmental Justice Screening Method⁴. According to staff's assessment, Fort Bragg and Point Arena are considered high-risk communities.

3 "Particulate matter" is unburned fuel particles that form smoke or soot and stick to lung tissue when inhaled. The numbers stand for microns in diameter.

4 California Air Resources Board (ARB), *Air Pollution and Environmental Justice, Integrating Indicators of Cumulative Impact and Socio-Economic Vulnerability Into Regulatory Decision-Making*, 2010. (Sacramento, California) Contract authors: Manuel Pastor Jr., Ph.D., Rachel Morello-Frosch, Ph.D., and James Sadd, Ph.D.

Table 2: EJ Indicators Compared With California
Yellow highlighted percentages indicate EJ indicators

	Below Poverty Level (2014)	Black Persons (2010)	American Indian and/or Alaska Native (2010)	Asian and/or Pacific Islander (2010)	Persons of Hispanic or Latino Origin (2010)	Persons Under 5 Years of Age (2010)	Persons Over 65 Years of Age (2010)	Unemployment (February 2017)
California	15.3%	6.2%	1.0%	13.0%	37.6%	6.8%	11.4%	5.0%
EJ Indicators	>15.3%	>30%	>30%	>30%	>30%	>8.16%	>13.8%	>5.0%
Caspar	9.0%	0.6%	0.0%	1.6%	2.9%	2.0%	29.1%	5.1%
Fort Bragg	22.3%	0.7%	2.2%	1.5%	31.8%	7.4%	13.7%	4.1%
Mendocino	6.7%	0.6%	0.9%	1.3%	4.7%	2.3%	27.3%	1.4%
Point Arena	16.6%	0.4%	0.2%	0.0%	33.4%	2.7%	12.9%	4.6%
San Diego	15.4%	6.7%	0.6%	15.9%	28.8%	6.2%	10.7%	4.0%
Willits	30.7	0.7%	4.4%	1.4%	20.6%	7.1%	5.4%	4.3%

Sources: Unemployment information from the State of California, Employee Development Department Labor Market Information Div.: <http://www.labormarketinfo.edd.ca.gov/data/unemployment-and-labor-force.html#Tool>. U.S. Census Bureau, <http://www.census.gov/quickfacts/table/PST045215/0664000.06.00> and http://factfinder.census.gov/faces/nav/jsf/pages/community_facts.xhtml

Location Analysis and Community Impacts

The proposed station locations were assessed according to the original LHI. The environmental justice indicators are comparable to the original set of station locations, the charger quantity and type along with the estimated gasoline gallons displaced are also comparable, and the anticipated impact to the communities where the electric vehicle chargers will be located remains positive in terms of cleaner air and anticipated greenhouse reductions.

APPENDIX A:

Localized Health Impact Report Assessment Method

Based on the California Energy Commission's interpretation of the *California ARB AQIP Guidelines*, this LHI Report assesses the potential impacts to communities because of the projects proposed by the ARFVTP. This report is prepared under the *California ARB AQIP Guidelines, California Code of Regulations, Title 13, Motor Vehicles, Chapter 8.1 (CCR § 2343)*:

“(6) Localized health impacts must be considered when selecting projects for funding. The funding agency must consider environmental justice consistent with state law and complete the following:

(A) For each fiscal year, the funding agency must publish a staff report for review and comment by the public at least 30 calendar days prior to approval of projects. The report must analyze the aggregate locations of the funded projects, analyze the impacts in communities with the most significant exposure to air contaminants or localized air contaminants, or both, including, but not limited to, communities of minority populations or low-income populations, and identify agency outreach to community groups and other affected stakeholders.

(B) Projects must be selected and approved for funding in a publicly noticed meeting.”

This LHI Report is not intended to be a detailed environmental health impact analysis of proposed projects nor is it intended to substitute for the environmental review conducted during the California Environmental Quality Act (CEQA) review. This LHI Report includes staff's application of the Environmental Justice Screening Method (EJSM) to identify projects located in areas with social vulnerability indicators and the greatest exposure to air pollution and associated health risks⁵.

The EJSM was developed to identify low-income communities highly affected by air pollution for assessing the impacts of climate change regulations, specifically Assembly Bill 32 (Núñez, Chapter 488, Statutes of 2006), the California Global Warming Solutions Act of 2006. The EJSM integrates data on (i.) exposure to air pollution, (ii.) cancer risk, (iii.) ozone concentration, (iv.) frequency of high ozone days, (v.) race/ethnicity, (vi.) poverty level, (vii.) home ownership, (viii.) median household value, (ix.) educational attainment, and (x.) sensitive populations (populations under 5 years of age or over 65 years of age).

⁵ California Air Resources Board (ARB). *Air Pollution and Environmental Justice, Integrating Indicators of Cumulative Impact and Socio-Economic Vulnerability Into Regulatory Decision-Making*, 2010. (Sacramento, California) Contract authors: Manuel Pastor Jr., Ph.D., Rachel Morello-Frosch, Ph.D., and James Sadd, Ph.D.

To determine high-risk communities, environmental justice (EJ) indicators for locations of the electric vehicle charging stations is compared to data from the U.S. Census Bureau or other public agency. Staff identifies high-risk communities by using a two-part standard. For a community to be considered high-risk, for this assessment, it must meet both Parts 1 and 2 of this standard.

Part 1:

- Communities located in nonattainment air basins for ozone, PM 2.5 or PM 10

Part 2:

- Communities having more than one of the following EJ indicators: (1) minority, (2) poverty, (3) unemployment and (4) high percentage of population under 5 years of age and over 65 years of age. The EJ indicators follow:
 - A minority subset represents more than 30 percent of a given city's population.
 - A city's poverty level exceeds California's poverty level.
 - A city's unemployment rate exceeds California's unemployment rate.
 - The percentage of people living in that city are younger than 5 years of age or older than 65 years of age is 20 percent higher than the average percentage of persons under 5 years of age or over 65 years of age for all of California.